Personal Systems Reference Lenovo® Essential Desktops

December 2011 - Version 411

C200 series All-In-One

C315 series All-In-One

*Visit **www.lenovo.com/psref** for the latest version*

Lenovo C200
Black

Lenovo C200
Black

Lenovo C200
Black

Lenovo® C200 (4025) - Windows 7

Type-model	Processor	GHz	Memory	Wide-screen display	Touch screen	Camera (mega-pixel)	Graphics	SATA disk	SATA optical	Color	TV tuner	PCIe Mini Card 802.11	Blue-tooth	Win7 preload	Avail date
4025-1BU	Atom D510	1.66	2GB DDR2	18.5" HD		0.3M	NVIDIA ION	320GB[8]	DVD±RW	Black	None	11b/g/n[28]	None	Prem 32	Apr 10
4025-1CU	Atom D510	1.66	2GB DDR2	18.5" HD	*Touch*	0.3M	NVIDIA ION	320GB	DVD±RW	Black	None	11b/g/n	None	Prem 32	Apr 10
4025-3GU	Atom D510	1.66	1GB DDR2	18.5" HD		0.3M	GMA 3150	250GB	DVD±RW	Black	None	11b/g/n	None	Prem 32	Aug 10
☞ 4025-3LU	Atom D525	1.80	1GB DDR3	18.5" HD		0.3M	GMA 3150	250GB	DVD±RW	Black	None	11b/g/n	None	Prem 32	Mar 11

- ***All-In-One design with 18.5" 16:9 wide screen***
- ***Some: touchscreen supports one-finger touch***
- ***Lenovo Rescue System provides OneKey recovery without booting into Windows***
- ***Easily adjustable stand (-5° to +25° viewing angle)***
- ***These systems are Microsoft Office 2010 Product Key Ready (O10PKR)***

Processor	**Intel® Atom™ Processor D510** with **dual-core**, integrated DDR2 memory controller (up to 800MHz), Hyper-Threading Technology, and 1MB L2 cache **Intel Atom Processor D525** with **dual-core**, integrated DDR2/DDR3 memory controller (up to 800MHz), Hyper-Threading Technology, and 1MB L2 cache
Memory	**1GB** or **2GB** std / 4GB max[7] / non-parity, single-channel *Some:* **PC2-5300 667MHz DDR2**, two 200-pin SO-DIMM sockets; *Some:* **PC3-6400 800MHz DDR3**, two 204-pin SO-DIMM sockets; *Non-Italics:* standard memory in one socket; one socket available
SATA DVD±RW	DVD burner, dual-layer support, fixed, removable, 12.7mm, tray-in
SATA disk	**250GB** or **320GB**, SATA 3.0Gb/s, 2.5" wide, 5400 rpm
Widescreen display	**18.5"** (470mm) **HD (1366x768) TFT color**, anti-glare**,** CCFL backlight, 250 nits**,** 16:9 aspect ratio, 1000:1 contrast ratio; *Some:* touchscreen supports one-finger touch
Camera	Camera on top of screen, 0.3-megapixel, fixed focus, with mono microphone
Controls	Power button, brightness up, brightness down, and display on/off buttons
Graphics	*Some:* **Intel Graphics Media Accelerator 3150 (GMA 3150)**, in processor; *Some:* **NVIDIA® ION™ graphics processor**, DirectX 10, PureVideo® HD technology, **256MB** memory
Chipset	**Intel NM10 Express Chipset**
Multicard reader	5-in-1 reader (MultiMedia Card, Memory Stick, Memory Stick PRO™, Secure Digital Card, Secure Digital High Capacity)
Ports	*Rear:* Three USB 2.0, ethernet (RJ-45), keyboard (PS/2), *Side:* Two USB 2.0
PCIe Mini Card	One Mini PCI Express Mini Card slot
11b/g/n[28]	11b/g/n wireless[4], PCIe Mini Card, Broadcom® BCM4313 or Atheros® AR9285
TV tuner	None
Bluetooth™	None
Modem	None
Ethernet	10/100 ethernet on planar, Intel® 82552V
Audio support	High Definition (HD) Audio, RealTek® ALC662 codec / two stereo speakers (3 watt x 2) / microphone, microphone input jack (3.5 mm), headphone jack (3.5 mm)
Security	Power-on password, supervisor password, security lockhole
Keyboard	PS/2 full-size keyboard, black
Mouse	USB Optical Wheel Mouse, black
Remote control	None
Dimensions[3]	*(WxHxD) including stand:* 18.12" x 15.13" x 6.63"; 460.3mm x 384.3mm x 168.3mm
Weight[2]	*Non-touchscreen model:* 16.0lb (7.26kg); *Touchscreen model:* 17.1lb (7.76kg)
Chassis	Front bezel: black color; back bezel: black color
Stand	Easily adjustable stand (-5° to +25° viewing angle)

Preloaded operating system[20]
- Genuine Windows® 7 Home Premium 32

Preloaded applications[14] (only some listed)
- Lenovo OneKey Recovery
- Driver and Application Installation
- McAfee® VirusScan® Plus (60 days of virus definitions)
- Cyberlink Power2Go (DVD±RW)
- Corel® WinDVD®
- Lenovo IdeaTouch (Touch models)
  – Lenovo VeriTouch
- Windows Live Essential
- Microsoft® Office 2010 preloaded; purchase product key to activate

65-watt AC adapter
RoHS-compliant

Limited Warranty[12]

- **1-year parts and labor**
- **Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts**[23]**, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)**
- **Service upgrade options (in eligible locations):**[9]
  - **2-year Lenovo In-Home Repair 9x5 Next Business Day** (78Y1552)
  - **3-year Lenovo In-Home Repair 9x5 Next Business Day** (78Y1553)
- **24x7**[16] **toll-free support for warranty issues during the warranty period**[12] **via 877-453-6686**

See footnotes for important warranty information

☞ US model announced March 23, 2011; previous models on April 28 or August 25, 2010

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Lenovo® C200 (4025) - Windows 7 (web only models)

Type-model	Processor	GHz	Memory	Wide-screen display	Touch screen	Camera (mega-pixel)	Graphics	SATA disk	SATA optical	Color	TV tuner	PCIe Mini Card 802.11	Blue-tooth	Win7 preload	Avail date
4025-3HU	Atom D410	1.66	2GB	18.5" HD	None	0.3M	GMA 3150	320GB[8]	DVD±RW	Black	None	11b/g/n[28]	None	Prem 32	Sep 10
4025-3JU	Atom D510	1.66	2GBx2	18.5" HD	None	0.3M	GMA 3150	500GB	DVD±RW	Black	None	11b/g/n	None	Prem 64	Sep 10
4025-3KU	Atom D510	1.66	2GBx2	18.5" HD	None	0.3M	NVIDIA ION	500GB	DVD±RW	Black	None	11b/g/n	None	Prem 64	Sep 10

- ***All-In-One design with 18.5" 16:9 wide screen***
- ***Lenovo® Rescue System provides OneKey recovery without booting into Windows***
- ***Easily adjustable stand (-5° to +25° viewing angle)***

Processor	**Intel® Atom™ Processor D410** with single-core, integrated DDR2 memory controller (up to 800MHz), Hyper-Threading Technology, and 512KB L2 cache or **Intel Atom Processor D510** with **dual-core**, integrated DDR2 memory controller (up to 800MHz), Hyper-Threading Technology, and 1MB L2 cache
Memory	**2GB** or **4GB** std / 4GB max[7] / **PC2-5300 667MHz DDR2**, non-parity, single-channel, two 200-pin SO-DIMM sockets
SATA optical	DVD burner, dual-layer support, fixed, removable, 12.7mm, tray-in
SATA disk	**320GB** or **500GB**, SATA 3.0Gb/s, 2.5" wide, 5400 rpm
Widescreen display	**18.5"** (470mm) **HD (1366x768) TFT color**, anti-glare**,** CCFL backlight, 250 nits**,** 16:9 aspect ratio, 1000:1 contrast ratio
Camera	Camera on top of screen, 0.3-megapixel, fixed focus, with mono microphone
Controls	Power button, brightness up, brightness down, and display on/off buttons
Graphics	*Some:* **Intel Graphics Media Accelerator 3150 (GMA 3150)**, in processor; *Some:* **NVIDIA® ION™ graphics processor**, DirectX® 10, PureVideo® HD technology, **256MB** memory
Chipset	**Intel NM10 Express Chipset**
Multicard reader	5-in-1 reader (MultiMedia Card, Memory Stick, Memory Stick PRO™, Secure Digital Card, Secure Digital High Capacity)
Ports	*Rear:* Three USB 2.0, ethernet (RJ-45), keyboard (PS/2) *Side:* Two USB 2.0
PCIe Mini Card	One Mini PCI Express Mini Card slot
11b/g/n[28]	11b/g/n wireless[4], PCIe Mini Card, Broadcom® BCM4313 or Atheros® AR9285
TV tuner	None
Bluetooth™	None
Modem	None
Ethernet	10/100 ethernet on planar, Intel® 82552V
Audio support	High Definition (HD) Audio, Realtek® ALC662 codec / two stereo speakers (3 watt x 2) / microphone, microphone input jack (3.5 mm), headphone jack (3.5 mm)
Security	Power-on password, supervisor password, security lockhole
Keyboard	PS/2 full-size keyboard, black
Mouse	USB Optical Wheel Mouse, black
Remote control	None
Dimensions[3]	*(WxHxD) including stand:* 18.12" x 15.13" x 6.63"; 460.3mm x 384.3mm x 168.3mm
Weight[2]	*Non-touchscreen model:* 16.0lb (7.26kg); *Touchscreen model:* 17.1lb (7.76kg)
Chassis	Front bezel: black color; back bezel: black color
Stand	Easily adjustable stand (-5° to +25° viewing angle)

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Home Premium 32
- *Some:* Genuine Windows 7 Home Premium 64

Preloaded applications[14] (only some listed)
- Lenovo OneKey Recovery
- Driver and Application Installation
- McAfee® VirusScan® Plus (60 days of virus definitions)
- Cyberlink Power2Go (DVD±RW)
- Corel® WinDVD®
- Lenovo IdeaTouch (Touch models) – Lenovo VeriTouch
- Windows Live Essential
- Microsoft® Office 2007 Trial (60-day)

65-watt AC adapter
RoHS-compliant

Limited Warranty[12]
- **1-year parts and labor**
- **Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts[23], 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)**
- **Service upgrade options (in eligible locations):**[9]
  - **2-year Lenovo In-Home Repair 9x5 Next Business Day** (78Y1552)
  - **3-year Lenovo In-Home Repair 9x5 Next Business Day** (78Y1553)
- **24x7**[16] **toll-free support for warranty issues during the warranty period**[12] **via 877-453-6686**

See footnotes for important warranty information
US models announced September 8, 2010

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Lenovo® C205 (7729)

Type-model	Pro-cessor	GHz	Memory	Wide-screen display	CCFL or LED	Touch screen	Camera (mega-pixel)	Graphics	SATA disk	SATA optical	Color	TV tuner	PCIe Mini Card 802.11	Blue-tooth	AC adapter	Win7 preload
7729-1LU	E-350	1.60	2GBx1	18.5" HD	LED	None	0.3M	HD6310	320GB[8]	DVD±RW	Black	None	11b/g/n[28]	None	65W	Home Prem 64
7729-1KU	E-350	1.60	4GBx1	18.5" HD	LED	None	0.3M	HD6310	500GB	DVD±RW	Black	None	11b/g/n	None	65W	Home Prem 64

- ***All-In-One design with 18.5" 16:9 wide screen***
- ***Some: touchscreen supports one-finger touch***
- ***Lenovo Rescue System provides OneKey recovery without booting into Windows***
- ***Easily adjustable stand (-5° to +20° viewing angle)***
- ***These systems are Microsoft Office 2010 Product Key Ready (O10PKR)***

Processor	**AMD Accelerated Processor E-350** (dual-core, 1.60GHz, 1MB L2 cache), integrated AMD Radeon™ HD 6310 Graphics, integrated DDR3 memory controller (up to 1066MHz)
Memory	8GB max[7] / non-parity, **PC3-10600 1333MHz DDR3***, two 204-pin SO-DIMM sockets; * System automatically clocks down for processors with 1066MHz DDR3 memory controller
SATA DVD±RW SATA disk	DVD burner, dual-layer support, fixed, removable, 12.7mm, tray-in **320GB** (5400 rpm) or **500GB** (5400 rpm), SATA 3.0Gb/s, 2.5" wide
Widescreen display Camera Controls	**18.5"** (470mm) **HD (1366x768) TFT color**, **LED** backlight, 250 nits**,** 16:9 aspect ratio, 1000:1 contrast ratio; *Some:* touchscreen supports one-finger touch Camera on top of screen, 0.3-megapixel, fixed focus Power button, brightness up, brightness down, and display on/off buttons
Graphics	**AMD Radeon HD 6310 Graphics** in processor, DirectX® 11, use system memory
Chipset Multicard reader Ports	**AMD A45 FCH** 5-in-1 reader (MultiMedia Card, Memory Stick, Memory Stick PRO™, Secure Digital Card, Secure Digital High Capacity) *Rear:* Three USB 2.0, ethernet (RJ-45), keyboard (PS/2), *Side:* Two USB 2.0
PCIe Mini Card 11b/g/n[28] TV tuner Bluetooth™ Modem Ethernet Audio support Security	Two PCIe Mini Card slots (one full size and one half size) 11b/g/n wireless[4], PCIe Mini Card, Broadcom®, Realtek®, or Atheros® chip None None None Gigabit ethernet on planar, Realtek RTL8111E High Definition (HD) Audio, Realtek ALC662 codec / two stereo speakers (3 watt x 2) / mono microphone, microphone input jack (3.5 mm), headphone jack (3.5 mm) Power-on password, administrator password, security lockhole
Keyboard Mouse Remote control	PS/2 full-size keyboard, black USB Optical Wheel Mouse, black None
Dimensions[3] Weight[2] Chassis Stand	*(WxHxD) including stand:* 18.12" x 15.13" x 6.63"; 460.3mm x 384.3mm x 168.3mm *Non-touchscreen model:* 12.8lb (5.8kg); *Touchscreen model:* 13.4lb (6.1kg) Front bezel: black color; back bezel: black color Easily adjustable stand (-5° to +20° viewing angle)

Preloaded operating system[20]
- Genuine Windows® 7 Home Premium 64

Preloaded applications[14] (only some listed)
- Lenovo OneKey Recovery
- Driver and Application Installation
- McAfee® VirusScan® Plus (60 days of virus definitions)
- Cyberlink Power2Go (DVD±RW)
- CyberLink YouCam
- Lenovo IdeaTouch (Touch models)
  - PowerCinema
  - Lenovo VeriTouch
  - PhotoStudio Paint
  - Lenovo Ebook and Quick Notes
- Windows Live Essential
- Microsoft® Office 2010 preloaded; purchase product key to activate
- Lenovo Dynamic Brightness System
- Lenovo Eye Distance System

Integrated models: 65-watt AC adapter
Discrete models: 90-watt AC adapter
RoHS-compliant

Limited Warranty[12]
- **1-year parts and labor**
- **Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts[23], 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)**
- **Service upgrade options (in eligible locations):[9]**
  - **2-year Lenovo In-Home Repair 9x5 Next Business Day** (78Y1552)
  - **3-year Lenovo In-Home Repair 9x5 Next Business Day** (78Y1553)
- **24x7[16] toll-free support for warranty issues during the warranty period[12] via 877-453-6686**

See footnotes for important warranty information
US models announced September 1, 2011

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Lenovo C315

Lenovo C315

Lenovo C315

Lenovo C315

Type-model	Processor	GHz	Memory	Wide-screen display	Multi-Touch screen	Camera (mega-pixel)	Discrete graphics	SATA disk	SATA optical	TV tuner	Remote control	PCIe Mini Card 802.11	Blue-tooth	Win7 preload	Avail date
4022-1AU	Athlon II X2 250u	1.60	2GB	20" HD+	*Multi*	0.3M	HD 4530	320GB[8]	DVD±RW	None	None	11b/g[28]	None	Prem 32	Apr 10

- ***All-In-One design with 20" 16:9 multi-touch screen***
- ***Lenovo® Rescue System provides OneKey recovery without booting into Windows***
- ***Advanced hinge design allows changing the screen angle with only one hand, and resting the screen angle at any intermediate position between 12° and 40°***

Processor	**AMD® Athlon™ II X2 Processor 250u** with **dual-core**, 3200MHz HyperTransport™ Bus, AMD Virtualization™ (AMD-V™) technology, AMD64 technology, int DDR2 memory controller, and 2MB L2 cache (1MB per core)
Memory	**2GB** std / 4GB max[7] / **PC2-5300 667MHz DDR2**, non-parity, dual-channel capable, two 200-pin SO-DIMM sockets; *Non-Italics:* standard memory in one sockets; one socket available
SATA DVD±RW	DVD burner, dual-layer support, fixed, removable, 12.7mm, tray-in
SATA disk	**320GB**, SATA 3.0Gb/s, 3.5" wide, 7200 rpm
Widescreen display	**20"** (508mm) **HD+ (1600x900) TFT color**, anti-glare**,** CCFL backlight, 250 nits**,** 16:9 aspect ratio, 1000:1 contrast ratio, MultiTouch
Camera	Camera on top of screen, 0.3-megapixel, fixed focus, with mono microphone
Controls	Power button, touch-sensitive buttons for brightness +/-, volume +/-, and display on/off
Discrete Graphics	**ATI™ Mobility Radeon™ HD 4530**, PCI Express® x16, **512MB** memory, DirectX® 10, ATI Avivo™ HD
Chipset	**AMD 690M Chipset**, SB600 south bridge
Multicard reader	6-in-1 reader (MultiMedia Card, Memory Stick, Memory Stick PRO™, Secure Digital Card, Secure Digital Elite Pro Card, xD-Picture Card™)
Ports	*Rear:* Four USB 2.0, ethernet (RJ-45), keyboard (PS/2), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) *Side:* Two USB 2.0
PCIe Mini Card 11b/g[28]	Two Mini PCI Express Mini Card slots 11b/g wireless[4], Mini PCIe adapter, Broadcom® BCM4312
TV tuner	None
Bluetooth™	None
Modem	None
Ethernet	10/100 ethernet on planar, Broadcom® BCM5787
Audio support	High Definition (HD) Audio, RealTek® ALC262 codec / two stereo speakers (2 watt) / microphone, microphone input jack (3.5 mm), headphone jack (3.5 mm)
Security	Power-on password, supervisor password, security lockhole
Keyboard	PS/2 full-size keyboard, black
Mouse	USB Optical Wheel Mouse, black
Remote control	None
Dimensions[3]	*(WxHxD):* 19.05" x 14.12" x 2.56"; 484mm x 359mm x 65mm
Weight[2]	16.3 lb (7.4 kg)
Chassis	Front bezel: brown color; back bezel: black color
Stand	Fold-away stand (adjustable between 12° and 40°)

Preloaded operating system[20]
- Genuine Windows® 7 Home Premium 32

Preloaded applications[14] (only some listed)
- Lenovo OneKey Recovery
- Driver and Application Installation
- McAfee® VirusScan® Plus (60 days of virus definitions)
- Cyberlink Power2Go (DVD±RW)
- Lenovo IdeaTouch
  - – PowerCinema
  - – Lenovo VeriTouch
  - – AutoCollage Touch
- Windows Live Essential
- Microsoft® Office 2007 Trial (60-day)

120-watt AC adapter
RoHS-compliant

Limited Warranty[12]
- **1-year parts and labor**
- **Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts[23], 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)**
- **Service upgrade options (in eligible locations):**[9]
  - **2-year Lenovo In-Home Repair 9x5 Next Business Day** (78Y1552)
  - **3-year Lenovo In-Home Repair 9x5 Next Business Day** (78Y1553)
- **24x7**[16] **toll-free support for warranty issues during the warranty period**[12] **via 877-453-6686**

See footnotes for important warranty information
US model announced April 28, 2010

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Lenovo® C315 (4022) - Windows 7 (web only models)

Type-model	Processor	GHz	Memory	Wide-screen display	Multi-Touch screen	Camera (mega-pixel)	Discrete graphics	SATA disk	SATA optical	TV tuner	Remote control	PCIe Mini Card 802.11	Blue-tooth	Win7 preload	Avail date
4022-1FU	Athlon II X2 250u	1.60	2GB	20" HD+	*Multi*	0.3M	HD 4530	320GB[8]	DVD±RW	TV	Remote	11b/g[28]	None	Prem 32	Apr 10
4022-1GU	Athlon II X2 250u	1.60	*4GB*	20" HD+	*Multi*	0.3M	HD 4530	500GB	DVD±RW	TV	Remote	11b/g	None	Prem 64	Apr 10

- ***All-In-One design with 20" 16:9 multi-touch screen***
- ***Lenovo® Rescue System provides OneKey recovery without booting into Windows***
- ***Advanced hinge design allows changing the screen angle with only one hand, and resting the screen angle at any intermediate position between 12° and 40°***

Processor	**AMD® Athlon™ II X2 Processor 250u** with **dual-core**, 3200MHz HyperTransport™ Bus, AMD Virtualization™ (AMD-V™) technology, AMD64 technology, int DDR2 memory controller, and 2MB L2 cache (1MB per core)
Memory	**2GB** or **4GB** std / 4GB max[7] / **PC2-5300 667MHz DDR2**, non-parity, dual-channel capable, two 200-pin SO-DIMM sockets; *Italics:* standard memory in both sockets; no sockets available; *Non-Italics:* standard memory in one sockets; one socket available
SATA DVD±RW	DVD burner, dual-layer support, fixed, removable, 12.7mm, tray-in
SATA disk	**320GB** or **500GB**, SATA 3.0Gb/s, 3.5" wide, 7200 rpm
Widescreen display	**20"** (508mm) **HD+ (1600x900) TFT color**, anti-glare**,** CCFL backlight, 250 nits**,** 16:9 aspect ratio, 1000:1 contrast ratio, MultiTouch
Camera	Camera on top of screen, 0.3-megapixel, fixed focus, with mono microphone
Controls	Power button, touch-sensitive buttons for brightness +/-, volume +/-, and display on/off
Discrete Graphics	**ATI™ Mobility Radeon™ HD 4530**, PCI Express® x16, **512MB** memory, DirectX® 10, ATI Avivo™ HD
Chipset	**AMD 690M Chipset**, SB600 south bridge
Multicard reader	6-in-1 reader (MultiMedia Card, Memory Stick, Memory Stick PRO™, Secure Digital Card, Secure Digital Elite Pro Card, xD-Picture Card™)
Ports	*Rear:* Four USB 2.0, ethernet (RJ-45), keyboard (PS/2), TV antenna connector, IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard) *Side:* Two USB 2.0
PCIe Mini Card	Two Mini PCI Express Mini Card slots
11b/g[28]	11b/g wireless[4], Mini PCIe adapter, Broadcom® BCM4312
TV tuner	AverMedia Hybrid TV MiniCard A317, PCIe Mini Card adapter, supports analog (NTSC) and digital (ATSC) signal
Bluetooth™	None
Modem	None
Ethernet	10/100 ethernet on planar, Broadcom® BCM5787
Audio support	High Definition (HD) Audio, RealTek® ALC262 codec / two stereo speakers (2 watt) / microphone, microphone input jack (3.5 mm), headphone jack (3.5 mm)
Security	Power-on password, supervisor password, security lockhole
Keyboard	PS/2 full-size keyboard, black
Mouse	USB Optical Wheel Mouse, black
Remote control	Philips®Win7 MCE remote control (40-button)
Dimensions[3]	*(WxHxD):* 19.05" x 14.12" x 2.56"; 484mm x 359mm x 65mm
Weight[2]	16.3 lb (7.4 kg)
Chassis	Front bezel: brown color; back bezel: black color
Stand	Fold-away stand (adjustable between 12° and 40°)

Preloaded operating system[20]
- *Some:* Genuine Windows® 7 Home Premium 32
- *Some:* Genuine Windows 7 Home Premium 64

Preloaded applications[14] (only some listed)
- Lenovo OneKey Recovery
- Driver and Application Installation
- McAfee® VirusScan® Plus (60 days of virus defi nitions)
- Cyberlink Power2Go (DVD±RW)
- Lenovo IdeaTouch
  - – PowerCinema
  - – Lenovo VeriTouch
  - – AutoCollage Touch
- Windows Live Essential
- Microsoft® Office 2007 Trial (60-day)

120-watt AC adapter
RoHS-compliant

Limited Warranty[12]
- **1-year parts and labor**
- **Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts**[23]**, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)**
- **Service upgrade options (in eligible locations):**[9]
  - **2-year Lenovo In-Home Repair 9x5 Next Business Day** (78Y1552)
  - **3-year Lenovo In-Home Repair 9x5 Next Business Day** (78Y1553)
- **24x7**[16] **toll-free support for warranty issues during the warranty period**[12] **via 877-453-6686**

See footnotes for important warranty information
US models announced April 28, 2010

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Lenovo C225/C325

Lenovo C225/C325

Lenovo C225/C325

Lenovo C225/C325

Lenovo C225/C325

Lenovo® C225 (3079) - web only models

Type-model	Pro-cessor	GHz	Memory	Wide-screen display	CCFL or LED	Touch screen	Camera (mega-pixel)	Graphics	SATA disk	SATA optical	Color	TV tuner	PCIe Mini Card 802.11	Blue-tooth	Keyboard/ Mouse	Win7 preload
3079-2AU	E-450	1.65	4+2GB	18.5" HD	LED	None	0.3M	HD 6320	1TB[8]	DVD±RW	Black	None	11b/g/n[28]	None	USB/Black	Prem 64
3079-3AU	E-450	1.65	2GBx2	18.5" HD	LED	None	0.3M	HD 6320	500GB	DVD±RW	White	None	11b/g/n	None	USB/White	Prem 64

- ***All-In-One design with 18.5" 16:9 wide screen***
- ***SRS® Premium Sound audio enhancement for immersive surround sound***
- ***Audio-in port to play music from your MP3 player without switching on the computer***
- ***Lenovo Rescue System provides OneKey recovery without booting into Windows***
- ***Stable full-metal stand with 5° forward / 25° backward viewing angle adjustment***
- ***These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)***

Processor	**AMD Accelerated Processor E-450** (dual-core, 1.65GHz, 1MB L2 cache), integrated AMD Radeon™ HD 6320 Graphics, integrated DDR3 memory controller (up to 1333MHz)
Memory	8GB max[7] / non-parity, **PC3-10600 1333MHz DDR3**, two 204-pin SO-DIMM sockets
SATA DVD±RW	DVD burner, dual-layer support, fixed, removable, 12.7mm, tray-in
SATA disk	**500GB** (7200 rpm) or **1TB** (7200 rpm), SATA 3.0Gb/s, 3.5" wide
Widescreen display	**18.5"** (470mm) **HD (1366x768) TFT color**, **LED** backlight, 250 nits**,** 16:9 aspect ratio, 1000:1 contrast ratio
Multi-touch	None
Camera	Camera on top of screen, 0.3-megapixel, fixed focus
Controls	Power on/off, menu, left, right, and display on/off buttons
Graphics	**AMD Radeon HD 6320 Graphics** in processor, DirectX® 11, use system memory
Chipset	**AMD A45 FCH**
Multicard reader	6-in-1 reader (MultiMedia Card, Memory Stick, Memory Stick PRO™, Secure Digital Card, Secure Digital High Capacity, Secure Digital Extended Capacity)
Ports	*Rear:* Four USB 2.0, ethernet (RJ-45), optional TV tuner connector on models equipped with TV tuner *Side:* Two USB 2.0
PCIe Mini Card 11b/g/n[28]	Two PCIe Mini Card slots (one full size and one half size) 11b/g/n wireless[4], PCIe half Mini Card, Broadcom®, Realtek®, or Atheros® chip
TV tuner	None
Bluetooth™	None
Modem	None
Ethernet	Gigabit ethernet on planar, Realtek RTL8111E
Audio support	High Definition (HD) Audio, Realtek ALC272 codec / SRS® Premium Sound™ certified / two stereo speakers (3 watt x 2) / internal mono microphone, audio-in/microphone jack (3.5 mm), headphone jack (3.5 mm)
Security	Power-on password, administrator password, security lockhole
Keyboard	*Some:* USB full-size keyboard, black *Some:* USB full-size keyboard, white
Mouse	*Some:* USB Optical Wheel Mouse, black *Some:* USB Optical Wheel Mouse, white
Remote control	None
Dimensions[3]	*(WxHxD) including stand:* 18.09" x 15.59" x 9.38"; 459.5mm x 396.1mm x 238.2mm
Weight[2]	From 12.65lb (5.74kg), vary by configuration
Chassis	Front bezel: black or white color; back bezel: black or white color
Stand	Easily adjustable stand (5° forward / 25° backward viewing angle adjustment)

Preloaded operating system[20]
- Genuine Windows® 7 Home Premium 64

Preloaded applications[14] (only some listed)
- Lenovo OneKey Recovery
- Driver and Application Installation
- McAfee® VirusScan® Plus (60 days of virus definitions)
- Cyberlink Power2Go (DVD±RW)
- CyberLink YouCam
- Lenovo Fun Zone
- Power Setting
- SRS Premium Sound
- Windows Live Essentials
- Microsoft® Office 2010 preloaded; purchase product key to activate
- Lenovo Dynamic Brightness System
- Lenovo Eye Distance System

65-watt AC adapter
ENERGY STAR® qualified
RoHS-compliant

Limited Warranty[12]
- **1-year parts and labor**
- **Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts[23], 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)**
- **Service upgrade options (in eligible locations):**[9]
  - **2-year Lenovo In-Home Repair 9x5 Next Business Day** (78Y1552)
  - **3-year Lenovo In-Home Repair 9x5 Next Business Day** (78Y1553)
- **24x7[16] toll-free support for warranty issues during the warranty period[12] via 877-453-6686**

See footnotes for important warranty information
US models announced December 21, 2011

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Lenovo® C325 (3095) - web only models

Type-model	Pro-cessor	GHz	Memory	Wide-screen display	CCFL or LED	Multi-Touch screen	Camera (mega-pixel)	Graphics	SATA disk	SATA optical	Color	TV tuner	PCIe Mini Card 802.11	Remote control	Keyboard/ Mouse	Win7 preload
3095-2AU	E-450	1.65	4+2GB	20.0" HD	LED		0.3M	HD 6320	1TB[8]	DVD±RW	White		11b/g/n[28]		USB/White	Prem 64
3095-3AU	E-450	1.65	4GBx2	20.0" HD	LED		0.3M	HD 6320	1TB	DVD±RW	Black		11b/g/n		USB/Black	Prem 64
3095-4AU	E-450	1.65	4+2GB	20.0" HD	LED	Multi	0.3M	HD 6320	1TB	DVD±RW	Black	TV	11b/g/n	Remote/Black	USB/Black	Prem 64
3095-5AU	E-450	1.65	4+2GB	20.0" HD	LED		0.3M	HD 6320	1TB	DVD±RW	White	TV	11b/g/n	Remote/White	USB/White	Prem 64
3095-6AU	E-450	1.65	4GBx2	20.0" HD	LED		0.3M	HD 6320	1TB	DVD±RW	Black	TV	11b/g/n	Remote/Black	USB/Black	Prem 64

- ***All-In-One design with 20.0" 16:9 wide screen with optional multi-touch***
- ***SRS® Premium Sound audio enhancement for immersive surround sound***
- ***Audio-in port to play music from your MP3 player without switching on the computer***
- ***Lenovo Rescue System provides OneKey recovery without booting into Windows***
- ***Stable full-metal stand with 5° forward / 25° backward viewing angle adjustment***
- ***These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)***

Processor	**AMD Accelerated Processor E-450** (dual-core, 1.65GHz, 1MB L2 cache), integrated AMD Radeon™ HD 6320 Graphics, integrated DDR3 memory controller (up to 1333MHz)
Memory	8GB max[7] / non-parity, **PC3-10600 1333MHz DDR3**, two 204-pin SO-DIMM sockets
SATA DVD±RW	DVD burner, dual-layer support, fixed, removable, 12.7mm, tray-in
SATA disk	**1TB** (7200 rpm), SATA 3.0Gb/s, 3.5" wide
Widescreen display	**20.0"** (508mm) **HD+ (1600x900) TFT color**, **LED** backlight, 250 nits**,** 16:9 aspect ratio, 1000:1 contrast ratio
Multi-touch	*Some:* multi-touch, 2-point support
Camera	Camera on top of screen, 0.3-megapixel, fixed focus
Controls	Power on/off, menu, left, right, and display on/off buttons
Graphics	**AMD Radeon HD 6320 Graphics** in processor, DirectX® 11, use system memory
Chipset	**AMD A45 FCH**
Multicard reader	6-in-1 reader (MultiMedia Card, Memory Stick, Memory Stick PRO™, Secure Digital Card, Secure Digital High Capacity, Secure Digital Extended Capacity)
Ports	*Rear:* Four USB 2.0, ethernet (RJ-45), optional TV tuner connector on models equipped with TV tuner *Side:* Two USB 2.0
PCIe Mini Card 11b/g/n[28]	Two PCIe Mini Card slots (one full size and one half size) 11b/g/n wireless[4], PCIe half Mini Card, Broadcom®, Realtek®, or Atheros® chip
TV tuner	*Some:* ATSC tuner, supports analog and digital signal, PCIe Mini Card
Bluetooth™	None
Modem	None
Ethernet	Gigabit ethernet on planar, Realtek RTL8111E
Audio support	High Definition (HD) Audio, Realtek ALC272 codec / SRS® Premium Sound™ certified / two stereo speakers (3 watt x 2) / internal mono microphone, audio-in/microphone jack (3.5 mm), headphone jack (3.5 mm)
Security	Power-on password, administrator password, security lockhole
Keyboard	*Some:* USB full-size keyboard, black *Some:* USB full-size keyboard, white
Mouse	*Some:* USB Optical Wheel Mouse, black *Some:* USB Optical Wheel Mouse, white
Remote control	*Some:* MCE remote control, via IR, black *Some:* MCE remote control, via IR, white
Dimensions[3]	*(WxHxD) including stand:* 19.65" x 16.82" x 9.38"; 499.0mm x 427.2mm x 238.2mm
Weight[2]	*Non-touch models:* from 13.9lb (6.3kg), vary by configuration *Touch models:* from 15.7lb (7.1kg), vary by configuration
Chassis	Front bezel: black or white color; back bezel: black or white color
Stand	Easily adjustable stand (5° forward / 25° backward viewing angle adjustment)

Preloaded operating system[20]
- Genuine Windows® 7 Home Premium 64

Preloaded applications[14] (only some listed)
- Lenovo OneKey Recovery
- Driver and Application Installation
- McAfee® VirusScan® Plus (60 days of virus definitions)
- Cyberlink Power2Go (DVD±RW)
- CyberLink YouCam
- Lenovo Fun Zone
- Power Setting
- SRS Premium Sound
- Lenovo IdeaTouch (Touch models)
  - PowerCinema
  - Lenovo VeriTouch
  - PhotoStudio Paint
  - Lenovo Ebook and Quick Notes
- Windows Live Essentials
- Microsoft® Office 2010 preloaded; purchase product key to activate
- Lenovo Dynamic Brightness System
- Lenovo Eye Distance System

65-watt AC adapter
ENERGY STAR® qualified
RoHS-compliant

Limited Warranty[12]
- **1-year parts and labor**
- **Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts[23], 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)**
- **Service upgrade options (in eligible locations):**[9]
  - **2-year Lenovo In-Home Repair 9x5 Next Business Day** (78Y1552)
  - **3-year Lenovo In-Home Repair 9x5 Next Business Day** (78Y1553)
- **24x7**[16] **toll-free support for warranty issues during the warranty period**[12] **via 877-453-6686**

See footnotes for important warranty information
US models announced December 21, 2011

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Lenovo® H215 (0893) - Windows 7

Type-model	Slot x bay	Processor	GHz	L2 cache	Cores	Memory[8]	Media reader	SATA disk	SATA optical	Graphics	TV tuner	Power supply	Win7 preload	Avail date
0893-1EU	4x4	Athlon II X2 240	2.80	2MB	2	2GBx1	16-in-1	320GB[2]	DVD±RW	Radeon 3000	None	180W	Prem 32	Aug 10
0893-1FU	4x4	Athlon II X2 240	2.80	2MB	2	2GBx2	16-in-1	1TB	DVD±RW	Radeon 3000	None	180W	Prem 64	Aug 10

- ***Lenovo Rescue System provides OneKey recovery and OneKey Antivirus without booting into Windows***
- ***These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)***

Processor	**AMD® Athlon™ II X2 Processor 240** with **dual-core,** 4000MHz HyperTransport™ Bus, AMD Virtualization™ (AMD-V™) technology, AMD64 technology, integrated DDR3 memory controller, and 2MB L2 cache (1MB per core)
Implementation	Processor in Socket AM3
Memory	**2GB** or **4GB std**, 4GB max[8], dual-channel capable, **PC3-8500 1066MHz DDR3**, non-parity, two 240-pin DIMM sockets
Graphics	**ATI™ Radeon™ 3000**, integrated graphics in 760G, uses main memory, DirectX® 10, ATI Avivo™, one analog VGA DB-15 connector, one HDMI connector, HDCP
SATA disk	**320GB** or **1TB**, SATA 3.0Gb/s, 7200 rpm
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in SB710
SATA DVD±RW	Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive
SATA cables	Two SATA cables (each 1-drop to device), four SATA connectors
EIDE controller	None
EIDE cables	None
Diskette drive	None
Media reader	16-in-1 media reader
Chipset	**AMD 760G Chipset** with HyperTransport 3.0 and PCI Express® 2.0 support; SB710 south bridge
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)
Rear ports	Four USB 2.0, keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), monitor (VGA DB-15, HDMI)
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)
Audio	High Definition (HD) audio, Realtek® ALC662 codec
External speakers	None
Internal speaker	None
Ethernet	10/100 ethernet on planar, Realtek 8103EL
Modem	None
Security chip	None
TV tuner	None
Camera	None
Keyboard	104-key standard keyboard (PS/2 connector)
Mouse	Optical Wheel Mouse (USB connector)
Power supply	180 watts, universal, manual switch

Tower

- Black bezel with glossy finish
- 6.9" W X 16.2" D X 14.2" H
- 175mm W X 412mm D X 360mm H
- 17.6 lb (8.0 kg), weight may vary by configuration

Bay ①	5.25",	1.6" high, access,	standard optical
Bay ②	N/A,	N/A, N/A,	media reader*
Bay ③	3.5",	1" high, no access,	standard disk
Bay ④	3.5",	1" high, no access,	optional disk

* Only for optional 16-in-1 media reader

Slot 1: half-length, full-height, PCI Express x16 Ver 2.0
Slot 2: half-length, full-height, PCI Express x1 Ver 2.0
Slot 3: half-length, full-height, PCI Express x1 Ver 2..0
Slot 4: half-length, full-height, 32-bit PCI Ver 2.3

Preloaded operating system[20]

- *Some:* Genuine Windows® 7 Home Premium 32
- *Some:* Genuine Windows 7 Home Premium 64

Preloaded applications[5]

- Lenovo® Rescue System
- Driver and Application Installation
- McAfee® VirusScan® Plus (60 days of virus definitions)
- Windows Live™ Essential
- Microsoft Office 2010 preloaded; purchase product key to activate
- CyberLink Power2Go (DVD±RW)

Limited Warranty[1]

- **1-year parts and labor**
- **Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts[3], 8 am - 5 pm)**
- **Service upgrade options (in eligible locations):**[9]
  - **2-year Lenovo Onsite Repair 9x5 Next Business Day (78Y1552)**
  - **3-year Lenovo Onsite Repair 9x5 Next Business Day (78Y1553)**
- **24x7[14] toll-free support for warranty issues during the warranty period[1] via 877-453-6686**

See footnotes for important warranty information
US models announced August 25, 2010

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Lenovo® H330 (7780) - Windows 7

Type-model	Slot x bay	Pro-cessor	GHz	Max turbo (GHz)	Memory[8]	DIMM capacity	Media reader	SATA disk	SATA optical	Graphics	802.11 wireless	USB3.0	Power supply	Win7 preload	Avail date
7780-1PU	2x3	i3-2100	3.10	None	4GB	(2, 2)	8-in-1	1.5TB[2]	DVD±RW	Intel HD Graphics	11b/g/n	None	180W	Prem 64	Jul 11
7780-1MU	2x3	G620	2.60	None	3GB	(1, 2)	8-in-1	500GB	DVD±RW	Intel HD Graphics	11b/g/n	None	180W	Prem 64	Jul 11
7780-1NU	2x3	G620	2.60	None	4GB	(2, 2)	8-in-1	1TB	DVD±RW	Intel HD Graphics	11b/g/n	None	180W	Prem 64	Jul 11
☞ 7780-4FU	2x3	G620	2.60	None	4GB	(4, 0)	8-in-1	500GB	DVD±RW	Intel HD Graphics	11b/g/n	None	180W	Prem 64	Dec 11
☞ 7780-3FU	2x3	i3-2120	3.30	None	4GB	(4, 0)	8-in-1	1.5TB	DVD±RW	Intel HD Graphics	11b/g/n	None	180W	Prem 64	Dec 11

- ***Lenovo Rescue System provides OneKey recovery without booting into Windows***
- ***These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)***

Processor	**Intel® Pentium® G620 Processor** (**2 cores / 2 threads**, 2.60 GHz, 3M Cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller **Intel Core™ i3-2100 Processor** (**2 cores / 4 threads**, 3.10 GHz, 3M Cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller **Intel Core i3-2100 Processor** (**2 cores / 4 threads**, 3.30 GHz, 3M Cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller
Implementation	Processor in LGA1155 socket
Memory	8GB max[8], **PC3-10600 1333MHz DDR3***, non-parity, dual-channel capable, two 240-pin DIMM sockets * System automatically clocks down for processors with 1066MHz DDR3 memory controller
Graphics	**Intel HD Graphics**, integrated graphics in processor, uses main memory, DirectX® 10, one analog VGA DB-15 connector, one HDMI connector, HDCP-compliant (only for i3/i5/i7 models)
SATA disk	**500GB**, **1TB**, or **1.5TB**, SATA 3.0Gb/s, 7200 rpm
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset
SATA optical	Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive
SATA cables	Two SATA cables (each 1-drop to device), two SATA connectors
EIDE controller	None
EIDE cables	None
Diskette drive	None
Media reader	8-in-1 media reader
Chipset	**Intel H61 Express Chipset**
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)
Rear ports	Four USB 2.0, keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), monitor (VGA DB-15, HDMI)
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)
Audio	High Definition (HD) audio, ALC662 codec
External speakers	None
Internal speaker	None
Wireless	11b/g/n wireless[4], PCIe x1 adapter
Ethernet	Gigabit ethernet on planar, Intel 82579V
Modem	None
Security chip	None
TV tuner	None
Camera	None
Keyboard	Full-size keyboard (PS/2 connector), Fn keys, black
Mouse	Optical Wheel Mouse (USB connector), black
Power supply	180 watts, universal, manual switch

Small Form Factor

- Black bezel with glossy finish
- 3.9" W X 15.7" D X 11.5" H
- 100mm W X 400mm D X 293mm H
- 21.5 lb (9.75 kg) vary by configuration

Bay ① 5.25", 1.6" high, access, standard optical
Bay ② 3.3", 0.6" high, access, 8-in-1 media reader
Bay ③ 3.5", 1" high, no access, standard disk

Slot 1: half-length, Low Profile, PCI Express x16 Ver 2.0**
Slot 2: half-length, Low Profile, PCI Express x1 Ver 2.0*

* Wireless adapter in slot in some models
** Graphics adapter in slot in some models

Preloaded operating system[20]
- Genuine Windows® 7 Home Premium 64

Preloaded applications[5]
- Lenovo® OneKey Recovery
- Driver and Application Installation
- McAfee® VirusScan® Plus (60 days of virus definitions)
- Lenovo Dynamic Brightness System
- Lenovo Eye Distance System
- Cyberlink PowerDVD (DVD±RW)
- CyberLink Power2Go (DVD±RW)
- Windows Live Essentials
- Microsoft® Office 2010 preloaded; purchase product key to activate

Limited Warranty[1]

- **1-year parts and labor**
- **Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts[3], 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)**
- **Service upgrade options (in eligible locations):**[9]
  - **2-year Lenovo Onsite Repair 9x5 Next Business Day (78Y1552)**
  - **3-year Lenovo Onsite Repair 9x5 Next Business Day (78Y1553)**
- **24x7[14] toll-free support for warranty issues during the warranty period[1] via 877-453-6686**

See footnotes for important warranty information
☞ US models announced December 21, 2011; previous models on July 6, 2011

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Lenovo® H330 (7780) - Windows 7 (web only models)

Type-model	Slot x bay	Pro-cessor	GHz	Max turbo (GHz)	Memory[8]	DIMM capacity	Media reader	SATA disk	SATA optical	Graphics	802.11 wireless	USB3.0	Power supply	Win7 preload	Avail date
7780-1HU	2x3	i5-2500	3.30	3.70	*8GB*	(4, 4)	8-in-1	1TB[2]	Blu-ray	Radeon HD 6450	None	None	250W	Prem 64	Jun 11
7780-1JU	2x3	i3-2120	3.30		*6GB*	(4, 2)	8-in-1	500GB	DVD±RW	Intel HD Graphics	None	None	180W	Prem 64	Jun 11

- ***Lenovo Rescue System provides OneKey recovery without booting into Windows***
- ***These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)***

Processor	**Intel® Core™ i3-2120 Processor** (**2 cores / 4 threads**, 3.30 GHz, 3MB Cache), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller **Intel Core i5-2500 Processor** (**4 cores / 4 threads**, 3.30 GHz, 6MB Cache),Turbo Boost Technology 2.0 (up to 3.70 GHz), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller
Implementation	Processor in LGA1155 socket
Memory	**6GB** or **8GB std**, 8GB max[8], **PC3-10600 1333MHz DDR3**, non-parity, dual-channel capable, two 240-pin DIMM sockets
Graphics	*Some:* **Intel HD Graphics**, integrated graphics in processor, uses main memory, DirectX® 10, one analog VGA DB-15 connector, one HDMI connector, HDCP *Some:* **AMD Radeon™ HD 6450**, PCI Express® x16, **1GB memory**, DirectX 11, one analog VGA DB-15 connector, one HDMI connector, HDCP
SATA disk	**500GB** or **1TB**, SATA 3.0Gb/s, 7200 rpm
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset
SATA optical	*Some:* Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive *Some:* Blu-ray™ Disc reader (no Blu-ray media burning), BD-ROM, DVD and CD recordable
SATA cables	Two SATA cables (each 1-drop to device), two SATA connectors
EIDE controller	None
EIDE cables	None
Diskette drive	None
Media reader	8-in-1 media reader
Chipset	**Intel H61 Express Chipset**
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)
Rear ports	Four USB 2.0, keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), monitor (VGA DB-15, HDMI)
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)
Audio	High Definition (HD) audio, ALC662 codec
External speakers	None
Internal speaker	None
Wireless	None
Ethernet	Gigabit ethernet on planar, Intel 82579V
Modem	None
Security chip	None
TV tuner	None
Camera	None
Keyboard	Full-size keyboard (PS/2 connector), Fn keys, black
Mouse	Optical Wheel Mouse (USB connector), black
Power supply	*Some:* 180 watts, universal, manual switch *Some:* 250 watts, universal, auto-sensing

Small Form Factor

- Black bezel with glossy finish
- 3.9" W X 15.7" D X 11.5" H
- 100mm W X 400mm D X 293mm H
- 21.5 lb (9.75 kg) vary by configuration

Bay ① 5.25", 1.6" high, access, standard optical
Bay ② 3.3", 0.6" high, access, 8-in-1 media reader
Bay ③ 3.5", 1" high, no access, standard disk

Slot 1: half-length, Low Profile, PCI Express x16 Ver 2.0**
Slot 2: half-length, Low Profile, PCI Express x1 Ver 2.0*

* Wireless adapter in slot in some models
** Graphics adapter in slot in some models

Preloaded operating system[20]
- Genuine Windows® 7 Home Premium 64

Preloaded applications[5]
- Lenovo® OneKey Recovery
- Driver and Application Installation
- McAfee® VirusScan® Plus (60 days of virus definitions)
- Lenovo Dynamic Brightness System
- Lenovo Eye Distance System
- Cyberlink PowerDVD (DVD±RW, Blu-ray)
- CyberLink Power2Go (DVD±RW, Blu-ray)
- Windows Live Essentials
- Microsoft® Office 2010 preloaded; purchase product key to activate

Limited Warranty[1]

- **1-year parts and labor**
- **Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts[3], 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time)**
- **Service upgrade options (in eligible locations):**[9]
  - **2-year Lenovo Onsite Repair 9x5 Next Business Day (78Y1552)**
  - **3-year Lenovo Onsite Repair 9x5 Next Business Day (78Y1553)**
- **24x7**[14] **toll-free support for warranty issues during the warranty period**[1] **via 877-453-6686**

See footnotes for important warranty information
US models announced June 22, 2011

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Lenovo® H405 (7723) - Windows 7

Type-model	Slot x bay	Processor	GHz	L2 cache	Cores	Memory[8]	Media reader	SATA disk	SATA optical	Graphics	TV tuner	Power supply	Win7 preload	Avail date
7723-1AU	4x4	Athlon II X2 255	3.10	2MB	2	2GBx1	6-in-1	500GB[2]	DVD±RW	Radeon 3000	None	180W	Prem 64	Jan 11
7723-1CU	4x4	Athlon II X4 645	3.10	2MB	4	2GBx2	6-in-1	1TB	DVD±RW	Radeon 3000	None	280W	Prem 64	Jan 11
7723-1DU	4x4	Athlon II X4 645	3.10	2MB	4	2+4GB	6-in-1	1TB	DVD±RW	Radeon 3000	None	280W	Prem 64	Jan 11
7723-1EU	4x4	Athlon II X2 255	3.10	2MB	2	2GBx2	6-in-1	500GB	DVD±RW	Radeon 3000	None	180W	Prem 64	Jan 11
7723-1FU	4x4	Athlon II X2 255	3.10	2MB	2	1+2GB	6-in-1	500GB	DVD±RW	Radeon 3000	None	180W	Prem 64	Jan 11

- ***Lenovo Rescue System provides OneKey recovery and OneKey Antivirus without booting into Windows***
- ***These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)***

Processor	**AMD® Athlon™ II X2 Processor 255** with **dual-core,** 4000MHz HyperTransport™ Bus, AMD Virtualization™ (AMD-V™) technology, AMD64 technology, integrated 1066MHz DDR3 memory controller, and 2MB L2 cache (1MB per core) **AMD Athlon II X4 Processor 645** with **quad-core,** 4000MHz HyperTransport Bus, AMD Virtualization (AMD-V) technology, AMD64 technology, integrated 1333MHz DDR3 memory controller, and 2MB L2 cache (512kB per core)
Implementation	Processor in Socket AM3
Memory	**2GB**, **3GB**, **4GB**, or **6GB std**, 8GB max[8], dual-channel capable, **PC3-10600 1333MHz DDR3**, non-parity, two 240-pin DIMM sockets * System automatically clocks down for processors with 1066MHz DDR3 memory controller
Graphics	**ATI™ Radeon™ 3000**, integrated graphics in 760G, uses main memory, DirectX® 10, ATI Avivo™, one analog VGA DB-15 connector, one HDMI connector, HDCP-compliant
SATA disk	**500GB** or **1TB**, SATA 3.0Gb/s, 7200 rpm
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in SB710
SATA DVD±RW	Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive
SATA cables	Two SATA cables (each 1-drop to device), four SATA connectors
EIDE controller	None
EIDE cables	None
Diskette drive	None
Media reader	6-in-1 media reader
Chipset	**AMD 760G Chipset** with HyperTransport 3.0 and PCI Express® 2.0 support; SB710 south bridge
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)
Rear ports	Four USB 2.0, keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), monitor (VGA DB-15, HDMI)
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)
Audio	High Definition (HD) audio, Realtek® ALC662 codec
External speakers	None
Internal speaker	None
Ethernet	10/100 ethernet on planar, Realtek 8103EL
Modem	None
Security chip	None
TV tuner	None
Camera	None
Keyboard	104-key standard keyboard (PS/2 connector), black
Mouse	Optical Wheel Mouse (USB connector), black
Power supply	*Some:* 180 watts, universal, manual switch *Some:* 280 watts, universal, manual switch

Tower

- Black bezel with glossy finish
- 6.9" W X 16.9" D X 14.5" H
- 175mm W X 430mm D X 368mm H
- 17.6 lb (8.0 kg), weight may vary by configuration

Bay ①	5.25",	1.6" high,	access,	standard optical
Bay ②	N/A,	N/A,	N/A,	media reader*
Bay ③	3.5",	1" high,	no access,	standard disk
Bay ④	3.5",	1" high,	no access,	optional disk

* Only for optional 6-in-1 media reader

Slot 1: half-length, full-height, PCI Express x16 Ver 2.0
Slot 2: half-length, full-height, PCI Express x1 Ver 2.0
Slot 3: half-length, full-height, PCI Express x1 Ver 2.0
Slot 4: half-length, full-height, 32-bit PCI Ver 2.3

Preloaded operating system[20]
- Genuine Windows® 7 Home Premium 64

Preloaded applications[5]
- Lenovo® Rescue System
- Driver and Application Installation
- McAfee® VirusScan® Plus (60 days of virus definitions)
- Windows Live™ Essential
- Microsoft Office 2010 preloaded; purchase product key to activate
- CyberLink Power2Go (DVD±RW)
- Lenovo Dynamic Brightness System*
- Lenovo Eye Distance System*

* Only applicable for optional Lenovo L2362p monitors

Limited Warranty[1]

- **1-year parts and labor**
- **Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts[3], 8 am - 5 pm)**
- **Service upgrade options (in eligible locations):**[9]
  - **2-year Lenovo Onsite Repair 9x5 Next Business Day (78Y1552)**
  - **3-year Lenovo Onsite Repair 9x5 Next Business Day (78Y1553)**
- **24x7[14] toll-free support for warranty issues during the warranty period[1] via 877-453-6686**

See footnotes for important warranty information
US models announced January 12, 2011

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Lenovo® H405 (7723) - Windows 7 (July 2011)

Type-model	Slot x bay	Processor	GHz	L2 cache	Cores	Memory[8]	Media reader	SATA disk	SATA optical	Graphics	TV tuner	Power supply	Win7 preload	Avail date
7723-1MU	4x4	Athlon II X2 260	3.20	2MB	2	2GBx1	6-in-1	500GB[2]	DVD±RW	Radeon 3000	None	280W	Prem 64	Jul 11
7723-1NU	4x4	Athlon II X2 260	3.20	2MB	2	2GBx2	6-in-1	500GB	DVD±RW	Radeon 3000	None	280W	Prem 64	Jul 11
7723-1KU	4x4	Athlon II X4 650	3.20	2MB	4	4+2GB	6-in-1	1TB	DVD±RW	Radeon 3000	None	280W	Prem 64	Jul 11
7723-1LU	4x4	Athlon II X4 650	3.20	2MB	4	2GBx2	6-in-1	1TB	DVD±RW	Radeon 3000	None	280W	Prem 64	Jul 11
☞ 7723-2CU	4x4	Athlon II X2 260	3.20	2MB	2	2GBx2	6-in-1	1TB	DVD±RW	Radeon 3000	None	280W	Prem 64	Dec 11
☞ 7723-2DU	4x4	Athlon II X4 650	3.20	2MB	4	4+2GB	6-in-1	1.5TB	DVD±RW	Radeon 3000	None	280W	Prem 64	Dec 11

- ***Lenovo Rescue System provides OneKey recovery and OneKey Antivirus without booting into Windows***
- ***These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)***

Processor	**AMD® Athlon™ II X2 Processor 260** with **dual-core,** 4000MHz HyperTransport™ Bus, AMD Virtualization™ (AMD-V™) technology, AMD64 technology, integrated 1066MHz DDR3 memory controller, and 2MB L2 cache (1MB per core) **AMD Athlon II X4 Processor 650** with **quad-core,** 4000MHz HyperTransport Bus, AMD Virtualization (AMD-V) technology, AMD64 technology, integrated 1333MHz DDR3 memory controller, and 2MB L2 cache (512KB per core)
Implementation	Processor in Socket AM3
Memory	8GB max[8], dual-channel capable, **PC3-10600 1333MHz DDR3**, non-parity, two 240-pin DIMM sockets * System automatically clocks down for processors with 1066MHz DDR3 memory controller
Graphics	**ATI™ Radeon™ 3000**, integrated graphics in 760G, uses main memory, DirectX® 10, ATI Avivo™, one analog VGA DB-15 connector, one HDMI connector, HDCP-compliant
SATA disk	**500GB**, **1TB**, or **1.5TB**, SATA 3.0Gb/s, 7200 rpm
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in SB710
SATA DVD±RW	Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive
SATA cables	Two SATA cables (each 1-drop to device), four SATA connectors
EIDE controller	None
EIDE cables	None
Diskette drive	None
Media reader	6-in-1 media reader
Chipset	**AMD 760G Chipset** with HyperTransport 3.0 and PCI Express® 2.0 support; SB710 south bridge
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)
Rear ports	Four USB 2.0, keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), monitor (VGA DB-15, HDMI)
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)
Audio	High Definition (HD) audio, Realtek® ALC662 codec
External speakers	None
Internal speaker	None
Ethernet	10/100 ethernet on planar, Realtek 8103EL
Modem	None
Security chip	None
TV tuner	None
Camera	None
Keyboard	104-key standard keyboard (PS/2 connector), black
Mouse	Optical Wheel Mouse (USB connector), black
Power supply	280 watts, universal, manual switch

Tower

- Black bezel with glossy finish
- 6.9" W X 16.9" D X 14.5" H
- 175mm W X 430mm D X 368mm H
- 17.6 lb (8.0 kg), weight may vary by configuration

Bay ①	5.25",	1.6" high, access,	standard optical
Bay ②	N/A,	N/A, N/A,	media reader*
Bay ③	3.5",	1" high, access,	standard disk
Bay ④	3.5",	1" high, access,	optional disk

* Only for optional 6-in-1 media reader

Slot 1: half-length, full-height, PCI Express x16 Ver 2.0
Slot 2: half-length, full-height, PCI Express x1 Ver 2.0
Slot 3: half-length, full-height, PCI Express x1 Ver 2.0
Slot 4: half-length, full-height, 32-bit PCI Ver 2.3

Preloaded operating system[20]
- Genuine Windows® 7 Home Premium 64

Preloaded applications[5]
- Lenovo® Rescue System
- Driver and Application Installation
- McAfee® VirusScan® Plus (60 days of virus definitions)
- Windows Live™ Essential
- Microsoft Office 2010 preloaded; purchase product key to activate
- CyberLink Power2Go (DVD±RW)
- Lenovo Dynamic Brightness System*
- Lenovo Eye Distance System*

* Only applicable for optional Lenovo L2362p monitors

Limited Warranty[1]

- **1-year parts and labor**
- **Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts[3], 8 am - 5 pm)**
- **Service upgrade options (in eligible locations):**[9]
  - **2-year Lenovo Onsite Repair 9x5 Next Business Day (78Y1552)**
  - **3-year Lenovo Onsite Repair 9x5 Next Business Day (78Y1553)**
- **24x7[14] toll-free support for warranty issues during the warranty period[1] via 877-453-6686**

See footnotes for important warranty information

☞ US models announced December 21, 2011; previous models on July 6, 2011

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Lenovo® H420 (7752) - Windows 7

Type-model	Slot x bay	Processor	GHz	Cache	Cores	Memory[8]	Media reader	SATA disk	SATA optical	Graphics	TV tuner	802.11 wireless	Power supply	Win7 preload
7752-1QU	4x4	Pentium G620	2.60	3MB	2	4GBx1	6-in-1	1TB[2]	DVD±RW	Intel HD graphics	None		280W	Prem 64
7752-1RU	4x4	Pentium G620	2.60	3MB	2	4GBx1	6-in-1	500GB	DVD±RW	Intel HD graphics	None		280W	Prem 64
7752-1SU	4x4	i3-2100	3.10	3MB	2	4GBx1	6-in-1	1TB	DVD±RW	Intel HD graphics	None	11b/g/n	280W	Prem 64
7752-1TU	4x4	i3-2100	3.10	3MB	2	4+2GB	6-in-1	1TB	DVD±RW	Intel HD graphics	None	11b/g/n	280W	Prem 64
☞ 7752-2CU	4x4	i3-2120	3.30	3MB	2	2GBx2	6-in-1	1TB	DVD±RW	Intel HD graphics	None	11b/g/n	280W	Prem 64

- ***Lenovo Rescue System provides OneKey recovery and OneKey Antivirus without booting into Windows***
- ***These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)***

Processor	**Intel® Pentium® G620 Processor** (**2 cores / 2 threads**, 2.60 GHz, 3MB Cache) integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller **Intel Core™ i3-2100 Processor** (**2 cores / 4 threads**, 3.10 GHz, 3MB Cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller **Intel Core i3-2120 Processor** (**2 cores / 4 threads**, 3.30 GHz, 3MB Cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller
Implementation	Processor in LGA1155 socket
Memory	8GB max[8], dual-channel capable, **PC3-10600 1333MHz DDR3***, non-parity, two 240-pin DIMM sockets * System automatically clocks down for processors with 1066MHz DDR3 memory controller
Graphics	**Intel HD Graphics,** integrated graphics in processor, uses main memory, DirectX®10, one analog VGA DB-15 connector, one HDMI connector, HDCP-compliant (only for i3/i5/i7 models)
SATA disk	**500GB** or **1TB**, SATA 3.0Gb/s, 7200 rpm
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset
SATA DVD±RW	Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive
SATA cables	Two SATA cables (each 1-drop to device), four SATA connectors
EIDE controller	None
EIDE cables	None
Diskette drive	None
Media reader	6-in-1 media reader
Chipset	**Intel H61 Express Chipset**
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)
Rear ports	Four USB 2.0, keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), monitor (VGA DB-15, HDMI)
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)
Audio	High Definition (HD) audio, Realtek® ALC662 codec
External speakers	None
Internal speaker	None
Wireless	*Some:* 11b/g/n wireless[4], PCIe x1 adapter
Ethernet	Gigabit ethernet on planar, Intel 82579LM
Modem	None
Security chip	None
TV tuner	None
Camera	None
Keyboard	104-key standard keyboard (PS/2 connector), black
Mouse	Optical Wheel Mouse (USB connector), black
Power supply	280 watts, universal, manual switch
Mechanical	**Tower** • Black bezel with glossy finish • 6.9" W X 16.9" D X 14.5" H • 175mm W X 430mm D X 368mm H • 17.6 lb (8.0 kg), weight may vary by configuration Bay ① 5.25", 1.6" high, access, standard optical Bay ② N/A, N/A, N/A, media reader* Bay ③ 3.5", 1" high, no access, standard disk Bay ④ 3.5", 1" high, no access, optional disk * Only for optional 6-in-1 media reader Slot 1: half-length,full-height, PCI Express x16 Ver 2.0 Slot 2: half-length,full-height, PCI Express x1 Ver 2.0* Slot 3: half-length,full-height, PCI Express x1 Ver 2.0 Slot 4: half-length,full-height, PCI Express x1 Ver 2.0 * Wireless adapter in slot in some models

Preloaded operating system[20]
- Genuine Windows® 7 Home Premium 64

Preloaded applications[5]
- Lenovo® Rescue System
- Driver and Application Installation
- McAfee® VirusScan® Plus (60 days of virus definitions)
- Windows Live™ Essentials
- Microsoft Office 2010 preloaded; purchase product key to activate
- CyberLink Power2Go (DVD±RW)
- Lenovo Dynamic Brightness System*
- Lenovo Eye Distance System*

* Only applicable for optional Lenovo L2362p monitors

Limited Warranty[1]

- **1-year parts and labor**
- **Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts[3], 8 am - 5 pm)**
- **Service upgrade options (in eligible locations):**[9]
  - **2-year Lenovo Onsite Repair 9x5 Next Business Day (78Y1552)**
  - **3-year Lenovo Onsite Repair 9x5 Next Business Day (78Y1553)**
- **24x7**[14] **toll-free support for warranty issues during the warranty period**[1] **via 877-453-6686**

See footnotes for important warranty information

☞ US model(s) announced December 21, 2011; previous models on July 6, 2011

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Partial list of Lenovo® Care Services[22] for Lenovo Essential desktops

For more information see:
http://www.lenovo.com/services_warranty/us/en/index.html

Lenovo Care service upgrade options

Lenovo Essential desktops with 1-year Onsite warranty

2-year Lenovo Onsite Repair warranty 9x5	78Y1552
3-year Lenovo Onsite Repair warranty 9x5	78Y1553

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Availability: All offers subject to availability. Lenovo reserves the right to alter product offerings and specifications at any time, without notice. Lenovo is not responsible for photographic or typographic errors.

Warranty: For a copy of applicable product warranties, write to: Warranty Information, P.O. Box 12195, RTP, NC, 27709, Attn: Dept ZPYA/B676. Lenovo makes no representation or warranty regarding third party products or services.

Footnotes:

[1] Power management, including Intel® SpeedStep® Technology, reduces processor speed when in battery mode.

[2] **Weight** includes battery and standard optical drive; weight may vary due to vendor components, manufacturing process and options.

[3] **Thinness** may vary at certain points on the system.

[4] **Wireless capability:** Requires compatible wireless-enabled options sold separately.

[5] **Post-warranty annual maintenance agreement:** Service begins at the end of the base warranty or the end of any other applied warranty and maintenance option, whichever occurs last. Service delivery is not available the same day the maintenance agreement is purchased. Maintenance agreements must be purchased and the registration successfully completed prior to the service being available.

[6] **Public network download modem speeds** are limited to 53Kbps. Upload speeds are limited to 48Kbps for V.92 modems. Actual speeds depend on many factors and are often less than the maximum possible. V.92 functions and speeds require compatible phone line and server equipment. Check with your telephone and ISP service providers for availability.

[7] **Maximum memory capacity** may require the replacement of standard component with largest supported component available. On systems, even though it is possible to physically install 4GB of memory, the actual amount of memory addressable by a 32-bit operating system will be limited to 3GB. This limitation does not exist with 64-bit operating systems.

[8] **Hard drive:** GB = billion bytes, TB = trillion bytes. Accessible capacity is less; up to 4GB is service partition.

[9] **Service upgrade options:** Service period begins with the equipment date of purchase. Service must be purchased during the original limited product warranty period. Service levels are response time objectives and are not guarantees.

[10] **Battery:** These model numbers achieved the battery life based on MobileMark® 2007 during testing. Battery life (and recharge times) will vary based on many factors including screen brightness, applications, features, power management, battery conditioning, and other customer preferences.

[11] **Wireless:** Based on IEEE 802.11a, 802.11b, and 802.11g respectively. An adapter with 11a/b, 11b/g, or 11a/b/g can communicate on either/any of these listed formats respectively, the actual connection will be based on the access point to which it connects.

[12] **Limited warranty:** Support unrelated to a warranty issue may be subject to additional charges.

[13] **Onsite Repair:** If a machine is listed as having "On-site", this means that on-site service is available for the replacement of parts for warranty repairs. Certain parts, referred to as Customer Replaceable Unit ("CRU") parts, are easy to install and require little or no tools or technical knowledge. Some examples of CRU parts are mice, keyboards, hard disk drives, speakers, and memory. If your problem can be resolved with a CRU, the Support Center will offer to ship the part to you for you to install.

[14] **Included software** may differ from its retail version (if available), and may not include user manuals or all program functionality. Software license agreements may apply.

[15] **Modem speeds:** Public network download speeds are limited to 53Kbps. Upload speeds are limited to 48Kbps for V.92 modems. Actual speeds depend on many factors and are often less than the maximum possible. V.92 functions and speeds require compatible phone line and server equipment. Check with your telephone and ISP service providers for availability.

[16] **Response times may vary.** May exclude some holidays. Telephone support may be subject to additional charges.

[17] **International Warranty Service** is available for most products in any country in which this product is sold and serviced. Service delivery methods and parts availability vary by country, may be different from that in the country of purchase, and are subject to change without notice. Fees and restrictions may apply in some countries.

[18] **Telephone support** may be subject to additional charges, even during the limited warranty period. Response times may vary and may exclude some holidays.

[19] **Depot repair service:** In the United States call 1-877-453-6686. The customer may be asked certain diagnostic questions before a courier is sent. Your purchase includes this depot repair service, available in the U.S. during the limited warranty period.

[20] **Operating System:** Level of support varies by operating system. Operating systems not preloaded on the system may not provide full feature functionality. Refer to lenovo.com/pc/support and enter your machine type and model number for more information.

[21] **For combination drives**, maximum possible speeds only are given in the following order: CD write, CD rewrite, CD read, DVD read.

[22] **Lenovo Care Services:** These services are available for machines normally used for business, professional, or trade purposes, rather than personal, family, or household purposes. Not all machine types and models are covered. Service period begins with the equipment date of purchase. Service must be purchased during the original limited product warranty period. Service levels are response time objectives and are not guarantees. If the machine problem turns out to be a Customer Replaceable Unit (CRU), a part can be express shipped to you for quick replacement. For notebooks requiring LCD or other component replacement, Lenovo may choose to perform service at the depot repair center. Calls must be received by 5 pm local time in order to qualify for Next Business Day service. P&L means parts and labor. P/U means pick-up. See terms and conditions for complete details and restrictions.

[23] **Customer Replacement Units** (CRUs) are designed to be replaced by customers during the applicable warranty period. Lenovo will send a technician onsite to perform a repair if remote telephone diagnosis does not isolate the problem, if customer replaceable parts are unable to resolve the problem, or at the request of the customer. For a list of customer replaceable parts, contact Lenovo. Support unrelated to a warranty issue may be subject to additional charges.

[25] **Wireless WAN Cards:** Wireless data service requires separate agreement with Verizon Wireless. Verizon Wireless, not Lenovo, is solely responsible for service. Monthly and airtime charges may apply. Service may not be available in all areas; purchaser is responsible for verifying with Verizon Wireless that service is available for the intended location before the purchase of the card. For complete details, including service plans, additional required hardware or software, and service coverage, visit www.verizonwireless.com.

[28] **The IEEE 802.11n specification (MIMO)** has been finalized and is currently in IEEE 802.11n-2009 release. The maximum speed depends on the access point device and the number of integrated antenna used for connection. An adapter with 11a/b, 11a/b/g, 11b/g/n, or 11a/b/g/n can communicate on any of its supported formats.

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